

Academic Workload Planning for Open and Distance Learning (ODL) Universities: The Experience of National Open University of Nigeria (NOUN)

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Abstract

The quality of the programmes and courses in ODL depends on the academics that plan the programmes, develop the curriculum, manage courses and programmes and carry out administrative duties. It is observed that the academics often complain of work overload. It also appears there is a mix-up in integrating the mode of planning workload in the conventional universities into the open and distance education universities. This may be attributed to inadequate spread in the duties assigned, which if not checked could affect the quality of teaching and learning. This necessitated the study that was carried out to determine academic workload in NOUN. The findings revealed a gap between academic activities and adequate utilisation of time. Also, inadequate spread of activities affects the quality of the academic inputs. This led to the development of academic workload model to guide the spread of academic activities in open and distance learning.

Keywords: distance education; workload; model; academic activities

Introduction

Open and Distance Learning (ODL) has been widely accepted in the world over as a means of widening access to education. In describing open and distance learning, UNESCO (2002) said:

"The term open and distance learning reflects both the fact that all or most of the teaching is conducted by someone removed in time and space from the learner, and that the mission aims to include greater dimensions of openness and flexibility, whether in terms of access, curriculum or other elements of structure" (p. 8).

The context of open and distance learning is peculiar, especially in academic workload. Therefore, to meet the objectives of open and distance learning different planning models are required in the allocation of workload.

The quality and standards in open and distance learning are often questioned where there is high enrolment. Quality in this perspective is viewed from the angle of learning being able to meet the set standards such that the graduates from such learning will be able to perform effectively in their respective fields of study.

In open and distance learning the academics are the core in quality determination. The academics are the staff that are certified as subject matter experts in their respective fields of study. The academic staff plan the programmes, develop the curriculum, manage courses/ programmes and carry out administrative duties. The extent to which these activities carried out by the academic staff to meet the set standards determines the quality of learning and knowledge gained.

The effectiveness and efficiency of the academics could be thwarted with the assigned workload. Workload is the specified duties assigned to an employee. The University of Exeter (2016) emphasized that

"Academic workload planning allows us to plan for an equitable and transparent spread of workloads. It means that workload is distributed strategically to maximize capacity and share departmental workload in ways that build on the strengths of all staff" (p. 1).

The total amount of duties assigned to an individual determines the level of effectiveness and efficiency in completion of such duties. Perks (2013) felt concerned when senior university managers say they do not have idea on how their staff utilize their official hours. This study is focused on eliciting a model that could be used in determining academic staff workload towards quality education in open and distance learning universities.

Statement of the Problem

The researcher observed that academic staff complain of high workload. This observation prompted further enquiry towards arithmetical knowledge of teacher student ratio. Officially, the university has its teacher-student ratio at 1:50. As at 2011, NOUN has a student enrolment of 38,431 with 188 full-time academic staff (NOUN, 2011), and in 2015 the student enrolment increased to 189,346 with full-time academic staff of 370 (NOUN, 2015). From the figures presented, it could be said that the teacher-student ratio as at 2011 was 1:204 and by 2015 it rose to 1:512. It is also worthy of note that the student enrolment comprises all students in academic certificates, diplomas, undergraduates, post-graduate diploma, masters' and Ph.D. programmes.

It was also observed that there is no policy document on academic workload distribution for open and distance universities at both university and national levels. What is obtainable at the national level —which is provided by the National Universities Commission (NUC)— is for the conventional universities. NUC is the accrediting body for all Nigerian Universities, including NOUN. Again, there seems to be a mix-up during accreditation where the open and distance academic staff workload is viewed from the conventional mode. Lastly, there is dearth of literature and guides on the determination of academic staff workload in open and distance learning. These observations stimulated the need for a working framework that could be adopted in open and distance universities.

Research Questions

- What is the work schedule of academic staff in a distance learning university?
- What are the perceptions of academic staff regarding their workload?

Research Hypotheses

- There is no significant difference among the responses of the different levels of academic staff on the academic teaching services.
- There is no significant difference among the responses of the academic staff on their perception on academic workload.

Scope and Delimitation of the Study

The study focused on teaching, scholarship, research and service related activities carried out by the academic staff in National Open University of Nigeria.

Existing Workload Models

The researcher studied the application of the workload models in the University of South Wales Academic Workload Model (2014), the University of Queensland (2015), CQUniversity of Australia (2016), The University of Melbourne (2014, 2015), James Cook University Australia (N.D.), Teesside University (N.D.), and the academic workload of the Republic of Rwanda (N.D.). All models have common guide as specified thus:

- An academic workload model must be fair and transparent.
- The model must be in line with the university vision and mission.
- Deans and Heads of Department to be responsible for the determination of staff workload and with the consent of the staff.
- Academic workload responsibilities are categorized thus:
 - Teaching and Related Duties: effective course coordination, development of courses, contributions towards teaching improvement, mentoring teaching and learning, etc.
 - Scholarship: Teaching-focused and Teaching Scholar (currency with existing technology, conference/seminar attendance relating to scholarship of teaching at local level, participation in professional development, innovation in teaching practice and delivery, sharing reflective teaching practice through presentations at seminars, conferences and workshops).
 - Research-Related Work.
 - Service-Related Work: serving on school or programme committee, contributions towards external body.
- To determine workload, the following are important:
 - List of all activities to be carried out.
 - Student credit hours.
 - Teacher-student ratio (classified according to faculty, therefore not same in faculties).
 - Class size and large enrolment class may require increase faculty time and effort depending on the pedagogy used.
 - Number of hours in a working year.
 - Number of hours in a working week (e.g. 8 hours per day multiplied by 5 working days per week will give 40 hours).
 - Number of weeks/hours of holidays and annual leaves. This will be deducted from the hours in a working year to get the actual number in a working year.
 - Number of hours used for lecture preparation.
 - Classification of activities into actual (such as scheduled teaching) and nominal hours (such as research and scholarly activity).
 - Hours for administrative duties.
 - Used crude approximations for activities such as lecture preparation and personal research.
 - Assumed arbitrary figures for teaching hour's baseline per week, marking, examination setting, invigilation, student contact, personal administration, networking and general reading.

Although the structure did not fully integrate the activities of open and distance learning, it served as a guide in determining the variables that would be required in calculating workload in open and distance learning.

The limit in the various models is that there was no clear expression on how figures representing the class size, credit units, contact hours attached to credit units were developed. It appeared that the figures were developed through assumptions. The researcher attempted to clarify this in the proposed model.

Academic Staff Workload in NOUN

The National Open University of Nigeria (NOUN) was established in 2002 as the only single mode open and distance university in Nigeria and first of its kind in West Africa sub-region to provide access to those who seek quality education at the university level through flexible learning (NOUN, 2015). There are two categories of academic staff: full-time and part-time. The full-time academic staff in NOUN are responsible for the planning, development and delivery of all the courses being offered at the university. In addition, they are to undertake research activities and participate in University/Professional/community services (Federal Republic of Nigeria, 2002). The part-time are the facilitators/tutors.

The National Universities Commission (NUC) being the accrediting body has stipulated standards for student and academic staff workload. Although these standards were specifically designed for conventional universities, they are also currently used to access distance universities. Staff/Student Workload as Stipulated by NUC (2007):

1. For undergraduate programmes:

- Every full-time student should be required to register for a minimum of 15 credit units per semester and a maximum of 24 credit units except for students on field experience.
- A full-time Lecturer, on the other hand, should have a minimum teaching load of 8 credit units per semester.
- Lecturer student ratio shall be (table 1):

Table 1: Lecturer-student ratio in Nigeria

S/N	Faculty	Lecturer-student Ratio
1	Art	1:30
2	Administration	1:30
3	Education	1:30
4	Science	1:20
5	Engineering	1:15
6	Medicine	1:10
7	Veterinary Medicine	1:10
8	Pharmacy	1:10
9	Management Science	1:30
10	Agricultural Science	1:15
11	Environmental Science	1:15
12	Social Science	1:30
13	Law	1:30

2. For postgraduate programmes:

- For academic workload for students will be a minimum of 12 credits for students per semester; and staff should have a maximum of 9 hours per week for lectures, tutorials, and supervision of projects.
- The teacher-student ratio for post graduate diploma in education shall be 1:20 (NUC, 2011, p. 9)
- 3. NUC specified one credit unit to be equivalent to:
 - One hour of lecture or tutorial per week per semester.
 - Two hours of seminar.
 - Three hours of laboratory or field work, clinical practice/practicum.
 - 6 hours of teaching practice.
 - One week of industrial attachment.

NUC provides guidelines for student and academic staff workload for all Nigeria universities to adhere to. NUC determined student workload by the number of credit unit's student carries and determined the academic staff workload by teacher-student ratio and number of hours taught by a lecturer per semester. Going by the activities in the context of open and distance learning, NOUN finds it difficult to determine academic staff workload using NUC model since the academic activities in NOUN differs from what operates in the conventional mode.

Literature Review

Setting of standards help to direct staff activities towards the attainment of quality delivery. A staff that is sure of fair treatment and security seems to achieve more in his/her job performance. This could be traced to the need why the workload in New Zealand University was developed based on equity, transparency, reasonableness, safety and accountability to staff (Paewai, Meyer & Houston, 2007). However, there are different practices on workload allocation. On the average, there are similarities on the methods, which seem to work on a continuum. Consideration of disciplinary context is very useful in allocating academic workload (Barrett & Barrett, 2011). Skewed allocation of types of work that is not associated with promotion leads to lack of transparency that affects increase in workload. Academic staff tend to give more attention to work that are considered for promotion. This is supported by Kenny (2016), who found that it is difficult to achieve high number of quality publications without proper academic workload management.

It is worthwhile to develop academic workload such that quality academic publications could be encouraged. Academic staff that is suffering from work overload could either end up with few quality publications or substandard publications that could lead to falling standard in education. The standard of education is likely to fall where academic publications are often focused on promotion rather than improving on the profession and the general standard in teaching and learning specific skills.

Tight (2010) survey in United Kingdom showed that an increase in academic workload is attributed to administrative demand. Academic staff are not only saddled with academic workload of teaching or preparing to teach but they also carry out administrative duties such as attending to students complain and participating in committee activities. Where the administrative works are overwhelming, the academic work suffers due to stress that may have occurred from the work overload. Kausar (2010) study showed a positive relationship between academic workload and perceived stress. Heavy workloads are identified as stressor at work as

academics feel that they cannot deliver as much as they would like to. Academics attribute their heavy workload to the quality of administrative duties they are to undertake (Darabi, Macaskill & Reidy, 2016).

The number of students taught can also increase academic workload. The study of Dobele and Rundle-Thiele (2014) showed that academics that taught fewer students had more publications and were internally promoted, as compared to their counterparts who taught larger students. It was suggested that

"academic internal promotion processes need to be carefully managed at the institutional, school and departmental levels to ensure that academics remain committed to teaching. For example, academics teaching larger course sizes and more classes should be rewarded via internal promotion processes" (p. 271).

The reaction of academics to workload could lead to scepticism, anger, vindication, justice and balance. Workload is means of balancing role expectations in an equitable and transparent manner. The problematic issue is that management use workload models as management tools to monitor and control the work place (Boyd, 2014), but Dekeyser, Watson and Bare (2016) argued for comprehensive cross institutional scrutiny of models to yield exhaustive and comparable data towards improved outcome. There is increase in workload when the focus of professional development is on technology and presentation rather than on pedagogy. This adds complexity without understanding (Haggerty, 2015). Academics are better empowered to understand and manage their workloads through the implementation of targeted professional development.

Academics need more balanced power relationships to influence key processes which control their work to preserve the self-managed aspects of academic work and the intrinsic motivations driving their career (Kenny, 2017). However, there is no link between workload and performance management at the operational level (Graham, 2016).

Method

Descriptive survey design was used in the study. The population for the study comprised all the 370 full-time academic staff in NOUN as at 2015. Simple random sampling technique was used to select 30% of the population, which gave 71. The researcher used 30% to have a fair representative of the population, and developed a questionnaire that was used to elicit information from the respondents. The questionnaire was pilot tested on 20 academic staff that were not part of the selected sample. The pilot test was analysed with the use of Cronbach Alpha Statistical analysis and the reliability co-efficient was 0.7. Two professors of Educational Management did the face and the content validity of the instrument. Data were collected on the academic status, teaching activities and workload. The responses for teaching activities were classified as 'Yes' and 'No' with the scale of 2=Yes and 1=No; while the workload was classified as 'Satisfactory', 'Unsatisfactory' and 'Don't Know' with the scale of 3=Satisfactory, 2=Unsatisfactory and 1=Don't Know.

The research questions were analysed with the use of percentage and weighted mean, while Analysis of Variance (ANOVA) was used to analyse the hypotheses at alpha level of 0.05.

The model was derived from the theoretical and empirical findings from the study.

Findings

Answer to Research Questions

Research Question 1: What is the work schedule of academic staff in a distance learning university?

Table 2: Teaching Activities in NOUN

Work Schedule	Resp	onses
Teaching activities done	Yes	No
Programme development	55	16
Course development	71	0
Course material writing	71	0
Course review	71	0
Course coordination	71	0
Online Facilitation	61	10
Project supervision	70	1
Teaching practice/SIWES	66	5
Laboratory or field work, clinical practice/practicum	30	41
Mentoring others in ODL teaching	21	50
Assessment (Tutor Marked/Computer Marked Assignments and Examination)	71	0
Monitoring of examination	51	20
Participation in Conference Marking	71	0
Weighted Mean	60 (85%)	11 (15%)

N = 71

The weighted mean in Table 2 of 60 (85%) and 11 (15%) shows 85% of the activities could be said to be the most common activities in the institution and 15% may not be common activities or they are the activities that affect some group of academics. For instance, not all faculties are involved in laboratory/field work/clinical/practicum. Also, mentoring may be more pronounced with senior academics like the professors. At one point or the other, these are the activities the academics agreed to be teaching activities in the institution.

Table 3: Scholarship Activities in NOUN

	Responses		
Scholarship: Teaching-focused and Teaching Scholar:	Yes	No	
Active participation in seminars, conferences at local and professional level	27	44	
Participation in training on modern technology for teaching and learning in ODL	55	16	
Being innovative in ODL teaching practice and delivery	11	60	
Sharing teaching ODL teaching practice through workshops, seminar, and conferences	7	64	
Research-Related Work – personal research work that will increase your chance for promotion	71	0	
Weighted Mean	34 (48%)	37 (52%)	

N = 71

The figures in Table 3 indicate that the listed activities are held in NOUN hence there is a 'yes' response to all activities though in limited number. The weighted mean of 48% for 'yes' and 52% for 'No' indicate a need for the university to adequately spread the workload. It could be said that some activities overshadow others. It is also observed from Table 3 that there is 100% agreement on personal research. This could mean that academics give more attention to personal research. It could be said that this occurs because it serves as the major consideration for their promotion.

Table 4: Service Related Work in NOUN

	Responses		
Service Related Work:	Yes	No	
Active participation in committees at departmental, faculty and university levels	71	0	
Administrative services such as Dean/HOD/Chair of a committee, desk officer (project, examination, seminar, publications etc)	48	23	
Professional consultancy to other institutions	11	60	
Professional contribution to the society	24	47	
Contributions to external professional bodies in your field of specialization	10	61	
Weighted Mean	33 (46%)	38 (54%)	

N = 71

The figures in Table 4 show a weighted mean percentage of 46% for 'yes' and 54% for 'No'. This implies that not all academic staff are aware of the various academic activities in NOUN. Generally, it could be said that the responses indicate the level of awareness of the different academic activities by the academic staff.

Research Question 2: What are the perceptions of academic staff regarding their workload?

Table 5: Level of Satisfaction of Teaching Activities by Academic Staff in NOUN

Work Schedule	Satisfactory	Unsatisfactory	Don't know
Teaching activities done:			
Programme development	68	3	0
Course development	51	20	0
vCourse material writing	29	42	0
Course review	16	55	0
Course coordination	32	39	0
Online Facilitation	5	66	0
Project supervision	71	0	0
Teaching practice/SIWES	45	26	0
Laboratory or field work, clinical practice/practicum	33	38	0
Mentoring others in ODL teaching	69	2	0
Assessment (Tutor Marked/Computer Marked Assignments and Examination)	12	59	0
Monitoring of examination	41	30	0
Participation in Conference Marking	67	4	0
Weighted Mean	41 (57.7%)	30 (42.3%)	0

N = 71

The result in Table 5 shows that 57.7% were satisfied with the academic activities. This represents average satisfaction. It was only in project supervision that a very high percentage (100%) was recorded. Online facilitation, assessment and course review recorded low satisfaction of 7%, 17% and 22,5% respectively. This could mean that the current process of online facilitation, assessment and course review require attention and improvement towards achieving desirable quality standard.

Table 6: Level of Satisfaction of Scholarship Activities by Academic Staff in NOUN

Work Schedule	Satisfactory	Unsatisfactory	Don't know
Scholarship: Teaching-focused and Teaching Scholar:			
Active participation in seminars, conferences at local and professional level	12	59	0
Participation in training on modern technology for teaching and learning in ODL	11	60	0
Being innovative in ODL teaching practice and delivery	10	61	0
Sharing teaching ODL teaching practice through workshops, seminar, and conferences	10	61	0
Research-Related Work – personal research work that will improve your specialisation	45	26	0
Weighted Mean	18 (25.4%)	53 (74.6%)	0

N = 71

The weighted mean in Table 6 shows 25.4% satisfaction. This implies a great shortfall from the required standard. It could also mean that scholarship activities do not receive much attention in the university.

Table 7: Level of Satisfaction of Service Related Work by Academic Staff in NOUN

Work Schedule	Satisfactory	Unsatisfactory	Don't know
Service Related Work			
Active participation in committees at departmental, faculty and university levels	68	3	0
Administrative services such as Dean/HOD/Chair of a committee, desk officer (project, examination, seminar, publications etc)	50	21	0
Professional consultancy to other institutions	2	69	0
Professional contribution to the society	15	56	0
Contributions to external professional bodies in your field of specialization	14	57	0
Weighted Mean	30 (42.3%)	41 (57.7%)	0

N = 71

The satisfactory level for service related work is 42.3% as shown in Table 7. This indicates the need to increase the level of service related activities, especially in professional consultancy to other institutions, which recorded 2,8%, contributions to external professional bodies in field of specialization (19,7%) and professional contribution to the society (21,1%).

From the weighted means in Tables 5, 6 and 7, it could be said that there is no balance in the academic activities required from the lecturers.

Table 8: Effect of Academic Workload in NOUN

To what extent do you agree with the following statements?	SA	Α	UD	D	SD
Inability to meet timelines reduces the job effectiveness and efficiency	58	10	0	3	0
Uncontrolled workload could lead to a reduction in the quality of service delivery	61	5	1	3	1
Lecturers often repeat question items because of so many activities they need to attend to a time	58	6	3	3	1
Most lecturers are unable to publish because of other urgent activities they need to respond to.	15	40	3	8	5
Weighted Mean	48 (67%)	15 (21%)	2 (3%)	4 (6%)	2 (3%)

N = 71

Key: SA = Strongly Agree, A = Agree, UD = Undecided, D = Disagree, SD = Strongly Disagreed.

The level of effect of academic workload on the staff reads 67% (table 8). This indicates high effect which if not controlled could affect the other activities and the quality of teaching and learning in the institution.

Testing of Research Hypotheses

Ho1: There is no significant difference among the responses of the different levels of academic staff on the academic teaching services.

Table 9: Descriptive Statistics of Respondents on Teaching Service

	N	Mean	Std. Deviation
Lecturer Status	71	3.76	1.388
Teaching Service	71	38.70	3.751
Valid N (listwise)	71		

324 Juliet Obhajajie Inegbedion

The mean and standard deviation scores in Table 9 show large deviation of responses from the mean. This could mean that the academic staff do not have equal knowledge of the required teaching services.

Table 10: ANOVA on the Responses of Academic Staff on Academic Services

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	930.851	5	186.170		
Within Groups	53.937	65	0.830	224.353	0.000
Total	984.789	70			

The figure in the Sig. column in table 10 reads .000, which is less than 0.05, therefore it is significant. This implies that there is a significant difference among the responses given by the different academic status. To find out where the difference lies, a post hoc analysis was done as presented in Table 11.

Table 11: Multiple Comparisons on Teaching Service (Scheffé's method)

(I) Lecturer Status	(J) Lecturer Status	Mean Difference	Std.	Sig.	95% Confidence Interval		
	, ,	(I-J)	Error	J	Lower Bound	Upper Bound	
	Associate Professor	1.25	0.519	0.339	-0.53	3.03	
	Senior Lecturer	3.938*	0.467	0.000	2.34	5.54	
Professor	Lecturer 1	7.000*	0.455	0.000	5.44	8.56	
	Lecturer II	10.000*	0.475	0.000	8.37	11.63	
	Assistant Lecturer	11.750*	0.519	0.000	9.97	13.53	
	Professor	-1.25	0.519	0.339	-3.03	0.53	
	Senior Lecturer	2.688*	0.394	0.000	1.33	4.04	
Associate Professor	Lecturer 1	5.750*	0.381	0.000	4.44	7.06	
	Lecturer II	8.750*	0.404	0.000	7.36	10.14	
	Assistant Lecturer	10.500*	0.455	0.000	8.94	12.06	
	Professor	-3.938*	0.467	0.000	-5.54	-2.34	
	Associate Professor	-2.688*	0.394	0.000	-4.04	-1.33	
Senior Lecturer	Lecturer 1	3.062*	0.306	0.000	2.01	4.11	
Locidioi	Lecturer II	6.062*	0.333	0.000	4.92	7.21	
	Assistant Lecturer	7.812*	0.394	0.000	6.46	9.17	

(I) Lecturer	(J) Lecturer Status	Mean Difference (I-J)	Std. Error	0	95% Confidence Interval		
Status				Sig.	Lower Bound	Upper Bound	
	Professor	-7.000*	0.455	0.000	-8.56	-5.44	
	Associate Professor	-5.750*	0.381	0.000	-7.06	-4.44	
Lecturer 1	Senior Lecturer	-3.062*	0.306	0.000	-4.11	-2.01	
	Lecturer II	3.000*	0.317	0.000	1.91	4.09	
	Assistant Lecturer	4.750*	0.381	0.000	3.44	6.06	
	Professor	-10.000*	0.475	0.000	-11.63	-8.37	
	Associate Professor	-8.750*	0.404	0.000	-10.14	-7.36	
Lecturer II	Senior Lecturer	-6.062*	0.333	0.000	-7.21	-4.92	
	Lecturer 1	-3.000*	0.317	0.000	-4.09	-1.91	
	Assistant Lecturer	1.750*	0.404	0.005	0.36	3.14	
	Professor	-11.750*	0.519	0.000	-13.53	-9.97	
	Associate Professor	-10.500*	0.455	0.000	-12.06	-8.94	
Assistant Lecturer	Senior Lecturer	-7.812*	0.394	0.000	-9.17	-6.46	
Locidioi	Lecturer 1	-4.750*	0.381	0.000	-6.06	-3.44	
	Lecturer II	-1.750*	0.404	0.005	-3.14	-0.36	

^{*.} The mean difference is significant at the 0.05 level.

From the analysis presented in Table 11, the difference lies between those in the professorial cadre and in the other cadre. This could mean that the workload of the professors and the other cadre are not same. For instance, in most cases, it is those at the professorial level that are made Deans, Heads of Department, serve as chair in most university committees and mentor the younger academics.

Ho2: There is no significant difference among the responses of the academics on their perception on academic workload.

Table 12: Descriptive Statistics of Respondents on Academic Workload

	N	Mean	Std. Deviation
Lecturer Status	71	3.76	1.388
Academic Workload	71	33.93	4.761
Valid N (listwise)	71		

The scores of the standard deviation on the academic workload are high (table 12), which indicates difference in the responses given by the different academic status on workload.

Table 13: ANOVA on Academic Workload

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1495.63	5	299.126		
Within Groups	91.016	65	1.4	213.624	0.000
Total	1586.65	70			

From the data in Table 13, Sig. is less than 0.05, therefore the null hypothesis is rejected. The result shows there is a significant difference in the responses given by the academics. To know where the difference lies, post hoc analysis was conducted with the result presented in Table 14.

Table 14: Multiple Comparisons on Academic Workload (Scheffé's method)

(I) Lecturer Status	(J) Lecturer Status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Professor	Associate Professor	0.65	0.675	0.967	-1.67	2.97
	Senior Lecturer	6.462*	0.606	0.000	4.38	8.54
	Lecturer 1	9.850*	0.592	0.000	7.82	11.88
	Lecturer II	13.329*	0.616	0.000	11.21	15.44
	Assistant Lecturer	13.650*	0.675	0.000	11.33	15.97
Associate Professor	Professor	-0.65	0.675	0.967	-2.97	1.67
	Senior Lecturer	5.812*	0.512	0.000	4.05	7.57
	Lecturer 1	9.200*	0.495	0.000	7.5	10.9
	Lecturer II	12.679*	0.524	0.000	10.88	14.48
	Assistant Lecturer	13.000*	0.592	0.000	10.97	15.03
Senior Lecturer	Professor	-6.462*	0.606	0.000	-8.54	-4.38
	Associate Professor	-5.812*	0.512	0.000	-7.57	-4.05
	Lecturer 1	3.388*	0.397	0.000	2.03	4.75
	Lecturer II	6.866*	0.433	0.000	5.38	8.35
	Assistant Lecturer	7.188*	0.512	0.000	5.43	8.95

(I) Lecturer Status	(J) Lecturer Status	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
		(I-J)			Lower Bound	Upper Bound
Lecturer 1	Professor	-9.850*	0.592	0.000	-11.88	-7.82
	Associate Professor	-9.200*	0.495	0.000	-10.9	-7.5
	Senior Lecturer	-3.388*	0.397	0.000	-4.75	-2.03
	Lecturer II	3.479*	0.412	0.000	2.06	4.89
	Assistant Lecturer	3.800*	0.495	0.000	2.1	5.5
Lecturer II	Professor	-13.329*	0.616	0.000	-15.44	-11.21
	Associate Professor	-12.679*	0.524	0.000	-14.48	-10.88
	Senior Lecturer	-6.866*	0.433	0.000	-8.35	-5.38
	Lecturer 1	-3.479*	0.412	0.000	-4.89	-2.06
	Assistant Lecturer	0.321	0.524	0.996	-1.48	2.12
Assistant Lecturer	Professor	-13.650*	0.675	0.000	-15.97	-11.33
	Associate Professor	-13.000*	0.592	0.000	-15.03	-10.97
	Senior Lecturer	-7.188*	0.512	0.000	-8.95	-5.43
	Lecturer 1	-3.800*	0.495	0.000	-5.5	-2.1
	Lecturer II	-0.321	0.524	0.996	-2.12	1.48

^{*.} The mean difference is significant at the 0.05 level.

There is no significant difference among Professors and Associate Professors (table 14). There is no significant difference between Lecturer II and Assistant Lecturers, either. This implies that the workload of the two highest cadres is similar, as well as the workload of the two lowest cadres. The difference is between the Professorial cadre and others.

Discussion

From the findings, the focus of the academic activities is more on course development, course material writing, course review and course coordination. These activities expressed the peculiarity of the academic activities in open and distance learning, which conform to the description of open and distance learning as given by UNESCO (2002). The course development deals with the curriculum and the knowledge in the developed curriculum is transferred to the students through the course materials and course review. The coordination takes care of the process of guiding and monitoring the quality of teaching and learning activities. These activities are activities that must be concluded before academic semesters can commence. It could therefore be said that academic staff are aware and involved in the basic open and distance learning activities.

It was observed that not all academic staff are involved in facilitation. On the other hand, most academic staff are either not aware or not involved in mentorship, either as mentees or mentors. This calls for attention. Good mentorship enhances quality teaching and learning in open and distance learning.

Scholarship activities need improvement. The academic staff seem to give more time to course development, course writing, assessment and course editing than scholarship and community services. This may be because of the emphasis the university has on course design and development as expressed by the Federal Republic of Nigeria (2002) in NOUN blueprint.

Although the academic staff are more involved in teaching activities (course design, course writing and coordination), most of them expressed dissatisfaction on the level of teaching activities in the institution. This was mostly attributed to too much administrative workload, which has adverse effect on the quality of teaching and learning in open distance learning. This supports Tight (2010), who found that increase in academic workload is attributed to administrative demand.

The findings reveal the need to address the management of academic workload. NUC (2007) stipulated the criteria for determining academic workload which include teaching, research and community services. There is the need to further determine the percentage that each of the components should have. In this study with consideration to the positive responses, 45.5% representing teaching activities, 25.8% scholarship and research activities and 28.8% community services. This supports the study of Kenny (2016), who found that it is difficult for academic staff to achieve high number of quality publications without proper academic workload management. Publication is the major criteria used for academic promotion. The 25.8% for scholarship and research activities is an indication that the staff do not have much time for research. To determine the acceptable percentage will require the level of contribution of each criterion -teaching, research and community service- to the overall goal. For instance, quality research is desirable to produce quality course material for the distance learners. The findings reveal that most academics are more interested in personal research that serves as a major determinant for their promotion with very little attention to scholarly work that would enhance their job performance and general contribution to the university. This corroborates the findings of Barrett and Barrett (2011) that the skewed allocation of types of work not strongly associated with promotion leads to lack of transparency that affect increase in workload. Attention is given more to what will help them earn promotion. This might also be one of the factors why mentorship and other community services receive less attention.

Based on the findings there is a need to have a workable workload model for the university. On this note, a model is therefore presented which could be adopted or adapted by NOUN and other open and distance learning institutions.

Justification for a Workload Model in NOUN

The summary of the findings in the study as presented below, justifies the need for a working model.

- 1. Academic staff is either not aware or not involved in some teaching activities.
- 2. Only about 48% of the academic staff actively takes part in scholarship teaching/activities.
- 3. Only about 46% academics actively take part in service related activities.
- About 48% academics show level of satisfaction of teaching activities.
- 5. Too much workload reduces the quality of the academics' job performance.
- 6. A difference exists in the workload of academic staff in the professorial level and others.
- 7. There is similarity in the workload of lecturer II and assistant lecturer.

Recommended Model

Based on the findings the following model is recommended.

- Step 1: Study the institutional vision and mission.
- Step 2: Study existing benchmark on workload as recommended by the national accrediting body. Relate the benchmark with the institutional vision and mission.
- Step 3: State all activities to be carried out by academic staff in line with the benchmark and institutional demand.
- Step 4: In line with step1 and step 2, arrange the activities into major categories and assigned expected percentages of achievement to the Categories.
- Step 5: List the activities in each category.
- Step 6: Calculate the total number of official working hours per week, per semester and per academic year.
- Step 7: Calculate the total number of hours for all annual leave including other official holidays such as public holidays declared by government.
- Step 8: Calculate the total number of hours for breaks during working hours per week, per semester and per academic year.
- Step 9: Add up step 7 and step 8 as per week, semester and academic year.
- Step 10: Subtract step 9 from step 6 to get the actual working hours
- Step 11: Divide the hours in step 10 (the answer after subtraction) into categories in step 4 using the assigned percentages.
- Step 12: Divide the hours in each category in step 11 with the number of activities in each category.

 This will help determine the minimum number of workload for each activity. It will also help to watch out for over concentration on certain activities to the detriment of others

Note:

- 1. The percentage assigned to the category could be reversed depends on institutional judgement. For instance, a Dean or HOD will need more attention for university community service than teaching. In this instance, the community service will have higher percentage. Community service could either be within the institution or outside the institution.
- 2. There is flexibility in the hours assigned. What should be considered is the number of official working hours on which the staff earn salary. For instance, the official working hours in Nigeria mostly in the public sector is 8 hours per day per five working days. This is what the government pay for. There could be flexibility on how these hours are spread in a day. Any other assigned official activity outside the stipulated hours that does not earn extra money is regarded as excess workload.
- 3. Activities on which staff are paid extra amount of money should not be considered among the workload within the working hours. For example, in NOUN staff is paid for project supervision.
- 4. The amount of extra work given should be considered so as not to affect the workload within the working hours.

Application of the model in NOUN Context

Step 1: Study the institutional vision and mission.

Vision:

To be regarded as the foremost university providing highly accessible and enhanced quality education anchored by **social justice**, **equity**, **equality and national cohesion** through a comprehensive reach that transcends all barriers

Mission:

To provide functional cost effective **flexible learning** which add life-long value to **quality education** for all who seek knowledge.

Step 2: Study existing benchmark on workload as recommended by the national accrediting body. Relate the benchmark with the institutional vision and mission.

From the benchmark, the activities of the academics cover teaching, research and community service. Teaching=40%, research=40% and 20% for community service.

8 working hours per working day

Step 3: State all activities to be carried out by academic staff inline with the benchmark and institutional demand.

At the institutional level, key things to consider include social justice, equity, equality, national cohesion, flexible learning and quality education.

The activities are as shown in Tables 1, 2 and 3 in this document.

Step 4: In line with step1 and step 2, arrange the activities into major categories and assigned expected percentages of achievement to the Categories.

See the defined categories in Tables 1, 2, and 3.

Step 5: State the number of activities in each category.

Teaching Activities = 13

Scholarship and Research related work = 5

• Service Related work = 5

Step 6: Calculate the total number of official working hours per week, per semester and per academic year. (Note, only the days within the time frame of the semester are considered).

The 2016 academic calendar was used.

Academic year resume on 11th January 2016

Academic year ends 20th December 2016

Working hours per day = 8 hours

Number of working days in the academic year = 248 days

Official working hours in the academic year = 248 days x 8 hrs = 1984

Step 7: Calculate the total number of hours for all annual leave including other official holidays such as public holidays declared by government.

Annual leave = 30 days x 8 hrs = 240 hrsPublic holidays = 12 days x 8 hrs = 96 hrs

Step 8: Calculate the total number of hours for breaks during working hours per week, per semester and per academic year.

One hour of break per working day

Break hours in the academic year = 248 days x 1hr = 248 hours

Step 9: Add up step 7 and step 8 as per week, semester and academic year.

$$240 + 96 + 248 = 584 \, hrs$$

Step 10: Subtract step 9 from step 6 to get the actual working hours

- Step 11: Divide the hours in step 10 (the answer after subtraction) into categories in step 4 using the assigned percentages.
 - Teaching Activities = 40%

$$\frac{40}{100} \times \frac{1400}{1} = 560 \text{ hours}$$

• Scholarship and Research related work = 40%

$$\frac{40}{100} \times \frac{1400}{1} = 560 \text{ hours}$$

• Service Related work = 20%

$$\frac{20}{100} \times \frac{1400}{1} = 280 \text{ hours}$$

- Step 12: Divide the hours in each category in step 11 with the number of activities in each category. This will help determine the minimum number of workload for each activity. It will also help to watch out for over concentration on certain activities to the detriment of others. (Note, the institution is to determine the weight of the activities and apply as determine. In this model, the weight on the activities in each category is same).
 - Teaching Activities = 13 activities

$$\frac{560}{13} = 43$$
 hours per activity per academic year

• Scholarship and Research related work = 5 activities

$$\frac{560}{5}$$
 = 112 hours per activity per academic year

Service Related work = 5 activities

$$\frac{280}{5}$$
 = 56 hours per activity per academic year

Note:

- 1. The number of activities should be determined by the university/faculty
- 2. This model can be used at departmental level to share workload equitably.

Recommendations

- 1. Each of the academic activities should be used for promotion. This will enhance the academic effectiveness in each of the activities identified.
- 2. The university need to come up with a model to guide the workload of staff.
- 3. The findings revealed high concentration on personal research to the detriment of other scholarly activities. To balance the activities, all activities should have points for promotion.
- 4. There should be adequate documentation and policies of academic workload and all academic staff should be aware of this to guide their performance in the various activities.
- 5. For quality in learning and teaching, the staff workload should be re-considered.

Conclusion

Quantitative determination of academic workload will enhance quality education. Through quantitative determination of academic workload all proposed activities that would lead to quality learning and teaching will be well covered.

A workable workload model in an institution makes self-assessment and evaluation of activities easy by being able to identity the areas of needs and to review the required resources that would help in meeting the identified needs. By application, there should be breakdown of the academic activities in each of the categories (teaching, scholarship and community service) with the stipulation of man-hour and other resources that would be required to successfully carry out each activity. There should be a balance in the involvement of academic staff in teaching activities, scholarship teaching/activities, service related activities and research for the achievement of quality education. When this is adequately done, it will help to determine salaries and wages.

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